

What is claimed is:

SUB A2 1. A compound 8 to 50 nucleobases in length targeted to a nucleic acid molecule encoding acyl coenzyme A cholesterol acyltransferase-1, wherein said compound 5 specifically hybridizes with and inhibits the expression of a nucleic acid molecule encoding acyl coenzyme A cholesterol acyltransferase-1.

SUB C1 2. The compound of claim 1 which is an antisense oligonucleotide.

10 3. The compound of claim 2 wherein the antisense oligonucleotide has a sequence comprising SEQ ID NO: 17, 18, 19, 21, 22, 25, 26, 28, 30, 31, 33, 34, 35, 36, 37 40, 41, 42, 43, 45, 46, 47, 48, 49, 50, 51, 53, 54, 55, 56, 57, 58, 59, 60, 61 or 62.

15 4. The compound of claim 2 wherein the antisense oligonucleotide comprises at least one modified internucleoside linkage.

5. The compound of claim 4 wherein the modified internucleoside linkage is a phosphorothioate linkage.

SUB C1 20 6. The compound of claim 2 wherein the antisense oligonucleotide comprises at least one modified sugar moiety.

7. The compound of claim 6 wherein the modified sugar moiety is a 2'-O-methoxyethyl sugar moiety.

25 8. The compound of claim 2 wherein the antisense oligonucleotide comprises at least one modified nucleobase.

9. The compound of claim 8 wherein the modified nucleobase is a 5-methylcytosine.

10. The compound of claim 2 wherein the antisense oligonucleotide is a chimeric oligonucleotide.

5 ~~11. A compound 8 to 50 nucleobases in length which specifically hybridizes with at least an 8-nucleobase portion of an active site on a nucleic acid molecule encoding acyl coenzyme A cholesterol acyltransferase-1.~~

12. A composition comprising the compound of claim 1 and
10 a pharmaceutically acceptable carrier or diluent.

13. The composition of claim 12 further comprising a colloidal dispersion system.

14. The composition of claim 12 wherein the compound is an antisense oligonucleotide.

15 15. A method of inhibiting the expression of acyl coenzyme A cholesterol acyltransferase-1 in cells or tissues comprising contacting said cells or tissues with the compound of claim 1 so that expression of acyl coenzyme A cholesterol acyltransferase-1 is inhibited.

20 16. A method of treating an animal having a disease or condition associated with acyl coenzyme A cholesterol acyltransferase-1 comprising administering to said animal a therapeutically or prophylactically effective amount of the compound of claim 1 so that expression of acyl coenzyme A
25 cholesterol acyltransferase-1 is inhibited.

17. The method of claim 16 wherein the condition involves abnormal lipid metabolism.

